

ABSTRACT

CELLULAR INVERTER WITH REDUCED SWITCHING DISTORTION RATE

A cellular inverter generates an alternating output voltage by a succession of serial combinations of DC voltage electrical sources that are available to it within switchable cells and, within a serial combination currently in use, by a voltage regulation using high-frequency chopping. This voltage regulation exhibits a certain lag and allows through an undesirable voltage step during the repositioning of its operating range caused by a change of the serial combination currently in use. The cellular inverter proposed comprises, in its high-frequency switch-mode voltage regulation circuit illustrated in the figure, a pre-compensation circuit (107, 108) that allows the lag to be compensated for and this undesirable voltage step to be considerably attenuated.

Fig. 5